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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,001	06/20/2003	Subhash M. Brahnavar		1000
27623	7590	09/29/2005		
OHLANDT, GREELEY, RUGGIERO & PERLE, LLP ONE LANDMARK SQUARE, 10TH FLOOR STAMFORD, CT 06901			EXAMINER LE, DANG D	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,001

Applicant(s)

BRAHMAVAR ET AL.

Examiner

Dang D. Le

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 32-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-15, 17, 19-22, 24, 26-31, 33 and 37-39 is/are rejected.
- 7) ☒ Claim(s) 11, 12, 16, 18, 23, 25, 32 and 34-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/20/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-39 in the reply filed on 9/1/05 is acknowledged. The traversal is on the ground(s) that the groups have the common invention. This is not found persuasive because the method claims involve steps requiring a separate search and examination.

The requirement is still deemed proper and is therefore made FINAL.

Specification

2. The abstract of the disclosure is objected to because it contains the words "comprising" and "said". Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5-7, 14, 15, 17, 19, 20, 22, 28, 29, 31, 37, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Leupold et al. (5,280,209).

Regarding claim 1, Leupold et al. shows a rotor assembly comprising:

- A rotor having an outer circumference and a longitudinal axis; and
- A plurality of magnet members (24) secured to said outer circumference, each of said plurality of magnet members having a degree of curvature about said longitudinal axis (the curvature of triangular magnets is the outer circumference while the curvature of the others is the inner circumference) , wherein a sum of said degrees of curvature is greater than 355.5 degrees.

Regarding claims 2, 3, and 5-7, it is noted that Leupold et al. also shows all of the limitations of the claimed invention including the first and second ends with first and second degree of curvatures, respectively (inner and outer circumference).

Regarding claims 14, 15, 17, 19, 20, 22, 28, 29, 31, 37, and 38, it is noted that Leupold et al. also shows all of the limitations of the claimed invention including the trapezoidal shape.

5. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Kliman et al. (5,345,130).

Regarding claim 1, Kliman et al. shows a rotor assembly comprising:

- A rotor having an outer circumference and a longitudinal axis; and
- A plurality of magnet members (34-37) secured to said outer circumference, each of said plurality of magnet members having a degree of curvature about said longitudinal axis, wherein a sum of said degrees of curvature is greater than 355.5 degrees (inner circumference).

Regarding claim 4, it is noted that Kliman et al. also shows all of the limitations of the claimed invention including the first degree of curvature being greater than 360

Art Unit: 2834

degrees and the second degrees of curvature (outer circumference) being less than 360 degrees.

6. Claims 1 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown (6,809,451).

Regarding claim 1, Brown shows a rotor assembly comprising:

- A rotor having an outer circumference and a longitudinal axis; and
- A plurality of magnet members (32a, Figure 13) secured to said outer circumference, each of said plurality of magnet members having a degree of curvature about said longitudinal axis, wherein a sum of said degrees of curvature is greater than 355.5 degrees (360 degrees from Figure 13 with inner circumference spanning 90 degrees).

Regarding claim 8, it is noted that Brown also shows all of the limitations of the claimed invention.

7. Claims 9, 10, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukushima (6,657,349)

Regarding claim 9, Fukushima shows a rotor assembly comprising:

- A rotor having an outer wall with a circumference; and
- A magnet (16) separated into a plurality of members (16a, 16b) that are secured to said outer wall and circumscribe said circumference, each of said plurality of members having a first end and a second end opposing said first end,

Art Unit: 2834

- Wherein each of said first ends is disposed adjacent to one of said second ends, and wherein at least one of said first ends is misaligned (Figure 5) with one of said second ends along said circumference.

Regarding claims 10 and 13, it is noted that Fukushima also shows all of the limitations of the claimed invention including parallel ends.

8. Claims 14, 21, 31, 33, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Sibata (5,220,228).

Regarding claims 14 and 21, Sibata shows a rotor assembly comprising:

- A rotor having a longitudinal axis and an outer wall with a circumference; and
- A plurality of magnet members secured to said outer wall about said circumference, each of said magnet members having opposing sides and a center axis, said center axis being parallel to said longitudinal axis, wherein at least two of said plurality of magnet members have said opposing sides being nonparallel (because of angle alpha, Figure 2B) along said center axis.

Regarding claim 31, 33, and 39, it is noted that Sibata also shows the stator (13).

9. Claims 22, 24, 26, 27, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwaki et al. (6,384,503).

Regarding claims 22, 24, 26, 27, and 30, Iwaki et al. shows all of the limitations of the claimed invention including nonparallel lines (Figure 2).

Allowable Subject Matter

Art Unit: 2834

10. Claims 11, 12, 16, 18, 23, 25, 32, 34-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: the record of prior art does not show:

- The rotor assembly with each of the first ends is disposed adjacent to one of the second ends, and wherein at least one of the first ends is misaligned with one of the second ends along the circumference, wherein at least one of the first ends has a first degree of curvature about the circumference, wherein the one of the second ends has a second degree of curvature about the circumference, and wherein the first degree of curvature is greater than the second degree of curvature as claimed in claim 11. Claim 12 depends on claim 11.
- The rotor assembly with at least two of the plurality of magnet members have the opposing sides being nonparallel along the center axis and wherein the opposing sides being first and second sides, wherein the first side forms a first angle with the center axis, wherein the second side forms a second angle with the center axis, wherein each of the first sides of the plurality of magnet members abuts another of the first sides of the plurality of magnet members, and wherein each of the second sides of the plurality of magnet members abuts another of the second sides of the plurality of magnet members as claimed in claim 16. claim 18 depends on claim 16.

- The rotor assembly with each of the plurality of members abuts another of the plurality of members, and wherein at least one of the separation lines is nonparallel to one of the center axis and wherein each of the plurality of members has first and second side walls, wherein the first side wall formed a first angle with the center axis, wherein the second side wall formed a second angle with the center axis, wherein each of the first side walls of the plurality of members abuts another of the first side walls of the plurality of members, and wherein each of the second side walls of the plurality of members abuts another of the second side walls of the plurality of members as claimed in claim 23. claim 25 depends on claim 23.
- The rotor with the pairs of the side walls abut against each other, and wherein at least one of the pairs of side walls are nonparallel to the longitudinal axis of the rotor and wherein the side walls are first and second side walls of each of the plurality of magnet members, wherein each of the plurality of magnet members has a center axis that is parallel to the longitudinal axis of the rotor, wherein the first side wall forms a first angle with the center axis, wherein the second side wall forms a second angle with the center axis, wherein each of the first side walls of the plurality of magnet members abuts another of the first side walls of the plurality of magnet members, and wherein each of the second side walls of the plurality of magnet members abuts another of the second side walls of the plurality of magnet members as claimed in claim 32. Claims 34-36 depends on claim 32.

Art Unit: 2834

Information on How to Contact USPTO

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D. Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/28/05

A handwritten signature in black ink, appearing to read 'Dang D. Le', is written in a cursive style.

**DANG LE
PRIMARY EXAMINER**